

Enhanced Airworthiness Program for Airplane Systems

Presented by:

Massoud Sadeghi

Aging Systems Program Manager

ATSRAC Meeting, April 2002



EAPAS Implementation Plan

The EAPAS is designed to enhance current airworthiness programs at operator facilities, repair stations, and manufacturing plants based on data-driven initiatives developed under the Aging Transport Non-Structural Systems Plan.



Enhancement Categories

The EAPAS implementation plan is organized into six major categories covering design, certification and maintenance of transport airplanes:

- Training
- Maintenance
- Design
- Research and Development
- Wire Reporting
- Information Sharing and Outreach

3



EAPAS Tasks

Near-Term

- Raise awareness about aging system issues
- Enhancements/changes in training and maintenance programs
- Tasks to be complete by late 2001

Longer-Term

- Institutionalize management of aging systems
- Changes in inspections and Instructions for Continued Airworthiness
- Changes to FARs for improvements in certification and maintenance
- Tasks are planned to be complete by mid-2004

4



 Original equipment manufacturers (OEM) will distribute to operators a "lessons learned" document and including information about contamination.

• The FAA will communicate its EAPAS Implementation Plan to airworthiness authorities, industry, and public.

During January 2001 ATSRAC meeting OEMs agreed to include information in service data. A formal FAA letter was provided in January 2002 meeting, requesting notes in service data for wire contamination. FAA is in process of sending the letter to OEMs, Operators, Modifiers, and Repair Stations.

On going. EAPAS is being presented through ARSRAC meetings and other technical working groups and meetings.

April 2002 5



- The FAA will draft an EAPAS
 Advisory Circular (AC) for aging
 systems maintenance and training
 programs.
- AFS will propose the adoption of voluntary changes to operations specifications (OpSpecs) for aging systems maintenance and training programs. Issue handbook information bulletin to explain to principal inspectors (PI) the voluntary OpSpecs and proposed rule changes.

Advisory Circulars are presently in FAA coordination with legal counsel.

To coincide with the release of the draft Advisory Circular.



 The FAA will complete a wire systems training program for Engineers, Inspectors and Designees.

 The FAA will issue Notice of Proposed Rule (NPRM)
 Airworthiness Directives (AD)
 based on ATSRAC
 recommendations.

- 80% of the FAA Systems and Propulsion engineer and 33% of inspectors have received the training.
 - By October 2002 all FAA Sys & Prop engineers and inspectors will be trained.
 - Some FAA courses include the information.
 - Information provided as Job Aid on internet.
- 23 AD's were identified. All final rules have now been published.



• The FAA will publish a wire installation drawing policy letter.

A memo identifying requirements for aircraft installation wiring has been published. A copy is now posted on the ATSRAC website.

- FAA will develop internal guidance and an AC for service difficulty reporting (SDR) rules.
- Review, analyze, and prepare recommendations in response to intrusive inspection conclusions and recommendations.

Handbook information bulletin and advisory circular comments are currently being disposed. Release of SDR rule is January 16, 2003.

Review in progress. Final report will be presented to ATSRAC in July 2002 and report released in September 2002.



EAPAS Longer-Term Actions

- Issue a Special Federal Aviation Regulation (SFAR) for development of an Enhanced Zonal Assessment Process (EZAP).
- Propose changes to update parts 91,121, 125, and 129 of FAR to add aging systems to the maintenance program.
- Develop a Phase II part 121 Advisory Circular (AC) to define an aging systems maintenance and training program.
- Change part 25 of FAR.

FAA is prepared to begin rulemaking process when ATSRAC reports are received.



EAPAS Status

- The EAPAS implementation plan was approved and published August 16, 2001.
- The EAPAS Near-Term actions are being accomplished.
- FAA is prepared to receive ATSRAC reports and start rulemaking process.
- Mechanical Systems Study is underway.
- Small Transport Airplane Systems Study (ATSRAC Working Group #10) is now formally underway.